REMARKS/ARGUMENTS

In view of the following remarks, reexamination and reconsideration of this application, withdrawal of the rejections, and formal notification of the allowability of all claims as presented are earnestly solicited. Claims 15-17 and 41-51 are pending. In response to the Office Action, Claims 15, 17, 41, 42, 44, 45, 48, 49, and 51 have been amended and Claim 16 has been cancelled. The amendments to the claims find support throughout the Specification and the Drawings and no new matter has been added. Accordingly, it is believed that the pending claims define patentable subject matter over the prior art cited by the Examiner and notice to such effect is requested at the Examiner's earliest convenience.

Claim Rejections – 35 U.S.C. § 102

Claims 15-17, 42, and 43 were rejected in the Office Action as being anticipated by U.S. Patent No. 6,076,281 to Kilpia *et al.*, U.S. Patent No. 4,356,059 to Hostetler, and U.S. Patent No. 6,398,909 to Klerelid. In response, independent Claims 15 and 42 have been amended to more clearly indicate patentable aspects of the present invention. Dependent Claims 17 and 41 have been amended for consistency with amended Claim 15, and dependent Claim 44 has been amended for consistency with amended Claim 42. The subject matter of Claim 16 has been incorporated into Claim 15, and Claim 16 has been cancelled.

Claims 15 and 42 have been amended to recite an apparatus for a dry end of a papermaking machine and an associated method whereby a paper web is transferred to a reel drum at a calendering nip formed between a free span of a calendering belt and the reel drum before being wound on a reel spool. These amendments find support throughout the Specification and the Figures, such as, for example, in FIG. 4. As such, no new matter has been added.

The Kilpia '281 patent discloses a web finishing section in a paper machine including a dryer section having one or more dryer groups, a calender, and a reel-up. In this configuration, a belt 76 runs over a guide roll 84 and into direct contact with a reeling cylinder (reel drum) 86 where the web is reeled to form a machine roll (reel spool) 88. The web is transported by the belt 76 through a nip formed by the guide roll 84 and the reeling cylinder 86 prior to being wound into a roll.

The Hostetler ‘059 patent discloses a papermaking machine for making bulky absorbent webs that includes a Yankee dryer 50, a reel drum, and a reel spool. The web is transported from the Yankee dryer to the reel drum on a belt 58. The web is transported by the belt 58 through a nip formed between a guide roll and the reel drum, at which point, the web is separated from the belt 58 and transferred to the reel drum, and then wound onto the reel spool.

The Klerelid ‘909 patent discloses an apparatus for imprinting, drying, and reeling a fibrous web. The apparatus comprises a winding drum (reel drum) 6 and a rotatable reel spool 3 for forming a finished roll 4. A press 30 is arranged in cooperation with the winding drum and forms a nip therebetween. At least one endless belt passes through the nip along with the web. The web is transferred to the winding drum at the nip and then wound onto the reel spool.

In contrast, Claims 15 and 42 of the present invention, as amended, are directed to an apparatus and associated method for a dry end of a papermaking machine, wherein a paper web is transferred to a reel drum at a calendering nip formed between a free span of a calendering belt and the reel drum. That is, the calendering belt, that forms the calendering nip with the reel drum, is stretched between at least a pair of spaced-apart guide rolls, with the free span being defined between the guide rolls. The Kilpia ‘281, Hostetler ‘059, and Klerelid ‘909 patents do not disclose a dry end of a papermaking machine in which a web is transferred to a reel drum at a calendering nip formed between a free span of a calendering belt and a reel drum. Instead, the Kilpia ‘281, Hostetler ‘059, and Klerelid ‘909 patents, as cited in the Office Action, each disclose a web being transferred to a reel drum at a nip formed between the reel drum and an adjacent roll or press. Accordingly, the Applicant submits that Claims 15 and 42, as amended, are not anticipated by any of the Kilpia ‘281, Hostetler ‘059, and Klerelid ‘909 patents.

Claims 45-47, 49, and 50 were also rejected in the Office Action as being anticipated by U.S. Patent No. 5,944,273 to Lin *et al.* In response, independent Claims 45 and 49 have been amended to more clearly indicate patentable aspects of the present invention. Dependent Claim 48 has been amended for consistency with amended Claim 45, and dependent Claim 51 has been amended for consistency with amended Claim 49.

Claims 45 and 49 have been amended to recite an apparatus and associated method for a dry end of a papermaking machine, whereby a paper web is calendered, supported, and guided onto a paper roll by a free span of a calendering belt having a controllable tension. These amendments find support throughout the Specification and the Figures such as, for example, at page 10, lines 26-28, and in FIG. 4A. As such, no new matter has been added.

With respect to the rejection of independent Claims 45 and 49, the Lin '273 patent discloses a winding method in which a tissue sheet 15 is carried on a transfer belt 18 which traverses an inclined span between two winding drums 21, 22. The sheet 15 is transferred from the transfer belt 18 to a parent roll 25 on a reel spool 26, where the parent roll 25 contacts the transfer belt 18 along the inclined span.

Claims 45 and 49 of the present invention, as amended, are directed to an apparatus and associated method for a dry end of a papermaking machine in which a paper web is calendered, supported, and guided onto a paper roll by a free span of a calendering belt having a controllable tension. That is, the paper web is calendered in a nip formed between the free span of the calendering belt and a paper roll, through a controllable tension in the calendering belt, whereby the controllable tension in the calendering belt is configured to provide a linear load in a calendering nip.

In contrast, the Lin '273 patent does not disclose a calendering process, but instead discloses a winding process. That is, one purpose of the embodiments of the present invention is to calender the web, or to reduce the web bulk prior to or upon winding. The Lin '273 patent teaches away from the bulk-reducing effect of a calendering process by indicating the desirability of constant sheet properties throughout a winding process. In the embodiment of the Lin '273 invention shown in FIG. 2, "[t]he reel spool [26] can be moved in either direction as illustrated by the double-ended arrow to maintain the proper transfer belt deflection needed to minimize the variability of the sheet properties during the winding process." See Lin '273 at column 8, lines 51-54 (emphasis added). In this regard, the Lin '273 patent does not teach a calendering process for the web as the web is wound. The Lin '273 patent also does not disclose a calendering belt having a controllable tension for controlling a linear load in a calendering nip.

Instead, as previously discussed, the Lin '273 patent moves the reel spool 26 with respect to the transfer belt 18 to maintain substantially constant sheet properties during a winding process. Accordingly, the Applicant submits that Claims 45 and 49, as amended, are not anticipated by the Lin '273 patent.

In conclusion, for the reasons set forth above, the Applicant submits that all claims now pending, namely Claims 15, 17, and 41-51, are in condition for immediate allowance. Accordingly, notice to such effect is requested at the Examiner's earliest opportunity.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

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